

NOTES ON MESEMBRYANTHEMUM AND ALLIED GENERA

By H. M. L. BOLUS

Scopelogenia L. Bol. gen. nov.—Fruticuli compacti vel caespitosi, cum aetate robusti, glabri, ad 30 cm. diam. vel ultra; rami primarii ad 7 mm. diam.; partes herbaceae levissimae, glaucae vel subglaucae virides; folia succulenta ascendentia, alterum paris saepe subfalcatum, supra plana vel leviter convexa, dorso rotundata vel obtuse carinata tumque lateraliter subcompressa, lat. visa apice rotundata vel obtusa vel abrupte acuta vel prope apicem leviter angustata acutaeque, 3—5 cm. longa, 3—8 mm. diam.; cymae saepe 3—8 cm. longae, demum $\pm$ laxae ramosae, 7—15-fl. vel ultra; pedunculi 4—15 mm. longi, basi, vel prope medium, bracteati, bracteis foliis simillimis, interdum apicem receptaculum attingentibus; receptaculum subclavatum vel obconicum, ad 5 mm. longum, ad 7 mm. diam.; sepala 5, acuta vel acuminata, saepe 4—6 mm. longa, vel inter se subaequilonga, 2 intima late membranaceo marginata; petala 2-seriata, inferne non, vel leviter, angustata, obtusa lutea, 6—8 mm. longa, ad 1.5 mm. lata; staminodia nulla; filamenta fere ab initio erecta, ovarium partim, stigmata omnino, exponentia, inferne pallida, superne lutea, exteriora inferne ciliate papillata, intima prope medium papillatis; nectarium anulare, crebre crenulatum; ovarii lobi leviter compressi obtusi, demum ad 1 mm. elevati; stigmata gracilia, e medio superne angustata, viridia, 4—5 mm. longa; capsula infra subclavata acuteque 5-angulatum vel obconica nonne angulata, ad 6 mm. longa, supra ad 2 mm. elevatum, suturis vix compressis, expansa non iterum claudens, 1—1.2 cm. diam., valvis non alatis, carinis fere a basi divergentibus, muticis, dimidium valvae attingentibus, alis tegentibus latis sed brevibus, vix dimidium loculi tegentibus, tuberculo placentali nullo, seminibus numerosis, basim loculi attingentibus, obovatis, margine interdum minutissime echinata, aliter inconspicue tuberculatis, saturate brunneis, ca. ad 1.25 mm. longis.

Ad **Lampranthum** proxime accedit, sed valvis capsulae expansae exalatis, alis tegentibus loculi brevioribus, capsula expansa non iterum claudente, differt.

The name (which may be freely translated as cragborn or a crag-dweller by birth) is derived from the Greek *scopelos*, a crag, high rock or peak, and *genos*, genus, race, descendant, child—in allusion to these being the wonted habitats of this genus.

Species 2.

1. **Scopelogenia veruculata** (L.) L. Bol. comb. nov.—*Mesembrianthemum foliis veruculiformibus*, floribus melinis umbellatis Dillen., Hort. Elth. t. 203, fig. 259. (1732). *Mesembryanthemum verruculatum* Linn., Sp. Pl. 486 (1753), Miller Dict., ed. 8, 33 (1768); Ait., Hort. Kew., ed. 1, 2 : 192 (1789); Haw., Obs. 260 (1794), Misc. 81 (1803), Synop. 258 (1812), Rev. 155 (1812); Willd., Sp. Pl. 2 : 1041 (1799); Ait. f., Hort. Kew., ed. 2, 3 : 211 (1811); Spreng., Syst. Veg. 2 : 250 (1825); DC., Prod. 3 : 438 (1828), Plant. Grass. t. 26 (1800); Salm-Dyck, Mesemb. § 39, t. 1 (1854); Sond., Fl. Cap. 2 : 428 (1862); Berger, Mesemb. 126 (1908); Jacobs., Handb. 3 : 1548 (1955). *Lampranthus veruculatus* (L.) L. Bol., Adamson and Salter, Fl. Cap. Pen. 385 (1950); Jacobs., Handb. 3 : 1212 (1960).

Cape Prov.: Cape Peninsula; "rocks W. of Lion's Head", fl. Oct. 1897, A. H. Wolley Dod 3663; Lion's Head, in fruit, Jan. 1897, *id.* 2420. Table Mountain, on rocks, alt. 2,000 ft., fl. Oct. 1902, R. Marloth 2581. Muizenberg, A. E. Eastman (Bolus Herb. 27107).

[There is no record available of this species having been collected beyond the limits of the Cape Peninsula.* The only collection cited by Sonder (Fl. Cap. 2 : 428) and by Berger (Mesemb. 127), as being this species, is that of Ecklon and Zeyher 2030 from "Mountain sides near Brackfonteyn, Clanwilliam". The portion of this collection in the Sonder Herbarium in Stockholm, which I have examined, is not **Scopelogenia**, but almost certainly is a **Malephora**.]

This species was introduced into England in 1732 and was known as the "spit-leaved fig-marigold". The Linnaean specific name retains this similitude,** being the adjective derived from the diminutive form, *veruculum*, of the Latin *veru*, "a spit for roasting meat, a dart, a javelin". The leaves in the wild plants, however, are very rarely as acute as those portrayed in the cultivated ones.

2. **S. gracilis** L. Bol. sp. nov. A **S. veruculata** foliis gracilioribus, interdum obtuse carinatis, lateribus saepe subcompressis; receptaculo obconico; capsula infra obconica, non angulata.

Cape Prov.: in dit. Swellendam; Grootvadersbosch, Dec. 1958, H. Hall 1506. Typus. "Numerous but seen only on high precipitous cliff in almost permanent shade. Formed lanky bushes 2—3 ft. in diameter, their yellow flowers visible from several yards away. Very old bushes had pendent main stems one inch thick" (Hall). In dit. Riversdale; Glen Leith,

*The same may be said of **Erepsia mutabilis** (Haw.) Schwant. Both Sonder (Fl. Cap. 2 : 414) and Berger (Mesemb. 196) have erroneously given the Uitenhage and Beaufort West Districts only as its localities, and have placed Zeyher 682 in the latter. But this collection, as represented in the Sonder Herbarium in Stockholm, is **Ruschia karroidea** L. Bol. from the Laingsburg District, and Zeyher 682 extends its range of distribution northwards.

**Assuming that the second "r" is a misprint or slip of the pen.

"on talus slopes below low cliffs among loose stones, also on rocky ledges and slopes of Table Mountain Sandstone, 400—700 ft.", *J. Muir* 4320. "Shrubby with moderately thick, brittle stems 12—18—24 inches long, erect, erect-patent or loosely decumbent or spreading on the slopes and becoming erect at end (ascending). Appearing at a distance as grey clumps. Fls. yellow, small, scented like *Nymphaea capensis* Thunb". (*Muir*). Little Karoo, fl. Oct. 27, 1929, *P. Ross Frames* (Bolus Herb. 27108).

This genus is in the group of fruticose plants containing, among others, the two large genera, **Lampranthus** and **Ruschia**, which have parietal placentation of the ovules; capsular fruit with 5—6 covered loculi, with or without a placental tubercle, and winged or wingless valves; and an anular nectary. It is separated from **Lampranthus** chiefly by the absence of valve-wings, and from **Ruschia** by the absence of the placental tubercle and by the yellow colour of the petals, which does not seem to occur in the genus, and from both by the capsule not closing again after the first expansion. (This characteristic was observed first by Mr. H. Hall in the course of his duties at Kirstenbosch and was recorded by him as being constant.) It is also one of the distinguishing characters of **Stoeberia**, which differs from **Scopelogenia** in having both winged valves and placental tubercles.

Trichodiadema aurea L. Bol. sp. nov.—Planta 1 visa, fera, 12 cm. alta; radix 13 cm. longa, inferne tuberosum, tubere 9 cm. longo, ad 3.5 cm. diam.; caulis lignosus, 8 mm. diam., reliquiis annorum priorum onustus; rami primarii ad 5 mm. diam., hornotini ad 8 cm. longi, internodiis novellis capillaceo papillatis, cum aetate asperis vel levibus, 5—10 mm. longis, ad 1.5 mm. diam.; folia ascendentia, supra plana obtusa, dorso rotundata, lat. visa superne vix angustata, obtusa, papillis basi apiceque brevissime setiferis, setis apicalibus saepius deflexis, ad 12 visis, gracillimis albis, ad 3 mm. longis, viridia, 5—6 mm. longa cum vagina 0.5 mm. longa, ad 2 mm. lata; pedunculi molliter papillate pubescentes, 2—8 mm. longi; receptaculum globose obconicum vel subglobosum, cum sepalis longe papillate pubescens, 2—3 mm. longum, 3—5 mm. diam.; sepalia 5, fere aequalia, obtusa, in flore minimo 2 mm., in maximo ad 4 mm., longa, basi 1—2 mm. lata, interiora marginata, setis apicalibus bene evolutis; petala 3-seriata, e prope medium inferne angustata, obtusa aurea, basi pallida, externe aurantiaca vel pallide roseo tincta, in flore minimo ad 6 mm., in maximo ad 8 mm., longa, ad 1.5 mm. lata; staminodia pallida, stamina erecta conferta bene excedentia; filamenta 4-seriata, pallida, ad 3 mm. longa, interiora prope medium papillata, antheris pollineque luteis; glandulae subapproximatae; ovarium supra planum, deinde medio obtuse 5-lobatum, lobis altitudinem glandularum attingenti-

bus; stigmata 5, anguste subulata. dimidio superiore caudato, 1.25 mm. longa.

Cape Prov.: Willowmore Div.; "15 miles E. of Willowmore", Sept. 28, 1961, *F. J. Stayner*. Karoo Garden 628/61.

Ruschia inclaudens L. Bol. sp. nov.—Glabra, "dense compacta" (*Esterhuysen*); rami plures visi, rigidi, copiose compacteque ramulosi, ad 21 cm. longi, ad 4 mm. diam., internodiis 1—2 cm. longis, cuticula brunnea; ramuli ultimi floriferi 2-foliati vel rarius 4-foliati, pari inferiore multo minore marcescenteque; folia anni prioris persistentia induratissima, hornotina ascendentia vel fere erecta, supra linearia vel oblonga, acuta vel acuminata, conspicue demumque subpungente apiculata, leviter convexa, dorso rotundata, lateribus convexis, lat. visa e medio superne angustata, acuta, altero paris interdum subfalcato, lamina 1.3—2 cm. longa, medio 5—7 mm. lata diametroque, vagina vera ad 4 mm. longa, impressae lineata, ad per 7 mm. decurrente; flores solitarii, expansi non iterum claudentes; pedunculi teretes, 2—6 mm. longi, prope basim bracteati, bracteis a foliis sat conspicue differentibus, lat. visis superne gradatim angustatis, marginibus membranaceis, ad 9 mm. longis, medio ad 2 mm. diam.; receptaculum globose obconicum, 3—4 mm. longum, 6—7 mm. diam.; sepala 5, subaequilonga, e medio superne angustata, acuta vel acuminata, dorso convexa, dimidio superiore mox marcescente, ad 6 mm. longa, basi 2—4 mm. lata, intima sat anguste marginata; petala 3—4-seriata, exteriora parum inaequilonga, intima pauca, in staminodia transeuntia, e prope medium inferne angustata, obtusa vel emarginata, roseo purpurea, ad 1.3 cm. longa, 0.5—2 mm., vel rarius ad 3 mm., lata; staminodia saepius staminibus breviora vel ea aequantia, inferne alba superne rosea; filamenta mox fere erecta, ca. 5-seriata, fere omnino rosea, intima parum supra basim longe papillata, antheris pollineque aureis; discus quasi e glandulis 5 coalitis compositus, crenulatus; ovarium circa marginem planum, medium versus leviter elevatum, lobis dorso complanatis; stigmata 5, gracilia, superne attenuata, 4—5 mm. longa; capsula senecta tantum visa, valvis exalatis, carinis parum ultra dimidium valvae attingentibus, muticis, tectis brevibus, tuberculis nullis (?esis), sed tamen in flore senectissimo tuberculis immaturis manifestis.

Cape Prov.: in dit. Robertson; Dassieshoek Peak, Langeberge, prope Robertson, alt. 4,000—5,000 ft., "in shallow soil on rock, along crest of rocky ridge, south side of peak, growing in dense clumps", Sept. 3, 1961, *E. Esterhuysen* 29136.

Lampranthus affinis L. Bol. sp. nov.—Plantae 2 visae. erectae glabrae, ad 20 cm. altae; rami primarii 5 mm. diam., florentes cum flore ad 16 cm. longi, 1.5—2 mm. diam., internodiis 1.5—4 cm. longis; folia ascendentia

vel patentia, fere semiteretia, supra plana vel superne convexula, lat. visa prope apicem vix angustata, abrupte acuta vel obtusa vel oblique truncata, levia, subglauce viridia, ad 2.5 cm. longa cum vagina 1 mm., 1.5—2 mm., vel rarissime ad 3 mm., lata diametroque; flores solitarii vel interdum 2-nati; pedunculi 3—4 cm. longi, prope medium bracteati; receptaculum subclavatum, 7 mm. longum, ad 6 mm. diam.; sepala 5, exteriora ex infra medium superne angustata, acuminata, ad 9 mm. longa, basi 4 mm. lata, interiora ample marginata, ad 7 mm. longa; petala exteriora 4-seriata, e medio inferne leviter angustata, obtusa, sat pallide pulcherrime rosea, nitentia, infra pallidiora, 1.8—2.3 cm. longa, 1.5—2 mm. lata, interiora 4-seriata, in staminodia transeuntia, 8—14 mm. longa, 0.5—1 mm. lata, intermedia cum interioribus erecta manentia, intima ad staminodia appressa; staminodia stamina conice conferta omnino occultantia eaque bene excedentia, pallide rosea vel alba; filamenta ca. 5-seriata, alba, exteriora basi tantum ciliate papillata, intima basi copiose papillata, papillis interdum roseis, antheris pollineque albis; ovarii lobi obtuse compressi, vix ad 1 mm. elevati; stigmata 5, subulata, ad 3 mm. longa cum cauda ad 1 mm. longa.

Cape Prov.: in dit. Prince Albert, Meiringspoort, *F. J. Stayner*. Karoo Garden 794/60 Fl. Oct.—Nov. 1961.

L. affinis forma.—A typo foliis ad 5 mm. diametro differt. "On S.E. shady side of Meiringspoort, hanging down in great clusters 5 feet wide and 2 feet deep", *F. J. Stayner*. Karoo Garden 842/60 Fl. Oct.—Nov. 1961. "This and the type were grown in full sun in the Karoo Garden" (*Stayner*).

This species belongs to the section *Haworthiana* Salm Dyck, which up to 1849 contained the following species, probably all described from plants raised from seed in England—*M. stipulaceum* L. (1753), *M. haworthii* Don (1800), *M. coralliflorum* Salm Dyck (1836)—a new name required for *M. corallinum* Haw. (1821), previously used for what is now **Psilocaulon corallinum** (Thunb.) Schwant., *M. productum* Haw. (1824), *M. Zeyheri* Salm Dyck (1849)—all of which were combined with **Lampranthus** by N. E. Br. in 1930. **L. affinis** has close affinities to all these (except **L. productus**, which has 3-nate flowers and the outer elongated sepals produced beyond the length of the petals), and is nearest to **L. coralliflorus** in the leaf-shape, but differs widely from this species, as represented by Salm Dyck (there is no type-specimen and Haworth's description is very brief), by having the petals in a more numerous series of lengths. In this respect it resembles the remaining 3 species, all of which have leaves tapering towards the apex. The upright position of some of the intermediate and inner petals, which appears to be maintained until they droop or

with, was not recorded in any of the species previously described. It remains to be seen, however, whether the normal position may be resumed or not in prolonged cultivation.

Pherolobus maughanii N. E. Br. var. **Stayneri** L. Bol. (Journ. S.A. Bot. 27 : 257). Capsula infra breviter crateriformis, 5-angulata, angulis rotundatis, apice constricta, sat conspicue nervata, ad 4 mm. longa, supra vix elevata, inter suturas valde compressas valde concava, ad 1 cm., expansa 1.6 cm., diam., valvis reflexis, carinis erectis distantibus, superne divergentibus, tenuibus, $\pm$ lacerulatis, aristatis, aristis apicem valvae attingentibus, alis valvae e basi liberis, sed carinis adnatis, alis tegentibus bene evolutis; semina subtruncate obovata, brunnea levia, ca. 1 mm. longa.

E. capsulis collectionis typici apud Kirstenbosch maturatis (N.B.G. 591/61) et e speciminibus fructiferis a *W. F. Barker* in loco typico collectis descripta.

Corrections and Additional Notes

Vol. XXVI: 161—162. **Stoeberia hallii** L. Bol. and **S. littlewoodii** L. Bol. These two species have been erroneously placed in **Stoeberia**. The presence of both valve-wings and placental tubercle in the capsule, as in **Stoeberia**, excludes them from **Ruschia** and **Lampranthus**. But the valves do not remain permanently erect after the first opening, as in **Stoeberia**, which excludes them also from this genus. A new genus is, therefore, required for them and for a number of other species, of which some in the greater development of the tubercle incline more towards **Ruschia**, and some in the more ample valve-wings to **Lampranthus**.

Vol. XXVII: 63, line 4. **Ruschianthus falcatus** L. Bol. flowered again at Kirstenbosch this October and produced well developed 3-nate flowers.

—p. 120, line 36. **Stoeberia apetala** L. Bol.—The second part of this collection developed into a fine plant at Kirstenbosch, and within 8 months produced flowers with very short and rather frail petals, enclosed within the sepals, exactly as in **R. micropetala** L. Bol. (These were not visible in the wild plant of **S. apetala**). The capsule of the type of **R. micropetala** was not described, and it is essential that it be known before this species can be placed correctly. If it should prove to be like that of **S. apetala**, which agrees both in structure and in seeds with that of typical **Stoeberia**, then it is erroneously sunk, as at present, in **Ruschianthemum gigas** (Dtr.) Friedr.

—p. 257, line 9. **Cephalophyllum calvinianum** L. Bol.—This has proved to be the same as **C. roseum** (L. Bol.) L. Bol.—*Leipoldtia rosea* L. Bol.

Mesemb.: II: 13 (Jul. 1927), and becomes its second synonym. This regrettable error has not even been the means of adding anything important to our knowledge of the species.

—Line 11. For 6—7 mm. etc., read 6—7 mm. diam., internodiis inclusis; partes herbaceae

—p. 258, line 11. Specimens of the type collection produced ripe fruit at Kirstenbosch and Miss Barker collected fruiting specimens in the type-locality in October. The capsule differs from that of *Dorotheanthus* in (1) not having accrescent and persistent sepals and stigmas, (2) the lower part of the capsule being rather conspicuously veined, and not smooth and spongy, and (3) the keels being erect, narrow, thin with $\pm$ lacerated margins, and pallid, and not flat broad and almost black.

—p. 263, line 26. For SPECIES read GROUPS.

—p. 264, line 22. For (N.E.Br.) read (L. Bol.).

The genus *Cephalophyllum* is among the earliest to have been introduced to botanists in Europe, the first figures recorded being those of J. Petiver, Gaza. 77 : fig. 10 (1702—1709) and R. Bradley, Hist. Succ. (1716—1727), followed by those of Dillenius, Hort. Elth. (1732). Up to 1832 a few species were added by A. H. Haworth; but it was not until about 1920 that additions were made by botanists in South Africa. In 1928—29 N. E. Brown listed 29 species (of which 2 are *nomina nuda*). This number has since been increased to more than 70 species, which range eastwards as far as the Uniondale Division, chiefly along the coastal districts, with a few in the western karoo, and northwards from the Cape Peninsula through Bushmanland and Namaqualand to South-West Africa. They are entirely glabrous throughout, and their flowers, with one exception (*C. staminodiosum*) are without staminodes. With one exception also (*C. frutescens*) they are lowly in their habit of growth. But no other genus of the *Mesembrieae* has so many species with such beautiful flowers. All shades of yellow are found in the petals, from lemon and primrose to golden and orange, sometimes varied with a red spot at the base, or with a red line down the middle of the back. Salmon pink, various shades of rose and rose-purple, sometimes burnished with a copper sheen, and red occur, culminating in the rich ruby tones of *C. alstonii*. Frequently the colour of the stamens contrasts with that of the petals, dark red and brown usually contrasting with yellow petals and dark purple ones with the rose-tinted petals.

The name of the genus is derived from the Greek *kephale* = head, and *phyllon* = leaf, because in the earliest species known tufts or “heads” of much longer leaves were formed from which elongated branches grew out in all directions, bearing smaller branchlets with shorter leaves.

But this habit is not constant in the genus and the following key may serve to show how it may be roughly divided into 7 groups, based upon the slighter variations there are in the general uniformity of its habit of growth.

KEY TO THE GROUPS

1. Heads of leaves conspicuous.
 2. Primary branches diffuse, elongated, rooting at the nodes .. e.g. *C. cedrimontanum* .. ELONGATA.
 2. Primary branches usually more compactly arranged, not rooting at the nodes e.g. *C. pillansii* .. DECUMBENTIA
1. Heads of leaves inconspicuous or absent.
 3. Primary branches rooting at the nodes e.g. *C. procumbens*, *C. stayneri*. REPTANTIA.
 3. Primary branches not rooting at the nodes.
 4. Primary branches elongated, prostrate normally or scrambling where support is available .. e.g. *C. spongiosum* .. PROSTRATA.
 4. Primary branches not elongated, $\pm$ erect.
 5. Plants compact or caespitose, low-growing.
 6. Rootstock woody and thick with age; internodes enclosed in wild plants .. e.g. *C. subulatoides*. .. ABBREVIATA.
 6. Roots fibrous, where known: internodes $\pm$ visible .. e.g. *C. pulchellum* .. CAESPITOSA.
 5. Plant frutescent up to 60 cm. in height (1 species, with a decumbent form) e.g. *C. frutescens* .. FRUTESCENS.

Cephalophyllum compressum L. Bol. sp. nov.—Planta integra non visa: rami plures floriferi. cum floribus ad 21 cm. longi, tantum visi, nodis non radicantibus, internodiis latere altero plano, altero convexo, 3—5 cm. longis, 3—5 mm. diam.; partes herbaceae pallide glaucae virides: folia ascendentia vel saepe alterum paris erectum, alterum adscendens

vel patens, supra plana vel leviter convexa, acuta, prope apicem carinata vel matura dorso omnino rotundata vel carina ad lineam reducta, lat. visa prope apicem angustata, acuta vel obtusa, levia, 3·5—5 cm. longa cum vagina ad 6 mm. longa, medio 6—8 mm. lata, 6—9 mm. diam.; flores 3-nati vel 2-ternati, lateralibus tarde evolutis; pedunculi 2·5—5 cm. longi, basi bracteati, bracteis ultimis interdum carinatis lateraliterque visis acutis aristatisque, 8—10 mm. longis; receptaculum ad 3 mm. longum, 7 mm. diam.; sepala 5, acuta, 7—11 mm. longa, basi 4—7 mm. lata, exteriora superne carinata; petala 3-seriata, ex infra medium inferne angustata vel interdum vix angustata, obtusa vel obscure emarginata, laete lutea, 1·7—2 cm. longa, 1·5—2 mm. lata; stamina ca. 4-seriata, lutea, filamentis ad 3 mm. longis vel parum ultra; ovarium e disco abrupte ad 2 mm. elevatum, lobis e basi acute compressis; stigmata 10, sat gracilia, 4 mm. longa cum cauda 0·75 mm.; capsula expansa 1·4 cm. diam.

South-West Africa; Witputs; Jun. 1938, *E. Erni* (S.U.G. 11073). Fl. Apr. 1939.

Another **Cephalophyllum** was collected at Witputs by Mr. E. Rusch in July 1933, which flowered in the Stellenbosch University Garden (848) in July 1936. This is represented in the Bolus Herbarium by 3 short flowering branchlets. It also has acutely compressed ovary-lobes and what, judging by the buds, might eventually have become a 2-ternate inflorescence. It differs from **C. compressum** in having the leaves more narrowed towards the base and rounded at the apex in side view, narrower sepals, broader petals (up to 3 mm. broad), more conspicuously narrowed downwards, golden, reddish towards the apex and on the back. The material seems too scanty to constitute the type of a new species, but it is hoped these notes made from the living specimens may lead to further collections from this locality.

Cephalophyllum concinnum L. Bol. sp. nov. (*Reptantia*).—Planta ca. 60 cm. diam.; rami primarii reptantes, senectissimi lignosi, ad 6 mm. diam., hornotini subflexuosi subcomplanati 2-angulati, breviter alati, ad 30 cm. longi, internodiis 1—3·5 cm. longis, 2—3 mm. diam.; ramuli ultimi ad 6-foliati; folia ascendunt, matura supra visa plana, apice rotundata vel rarius subacuta, dorso rotundata vel obtuse carinata, lat. visa saepe superne dilatata, 2·5—5·2 cm. longa cum vagina 3—6 mm. longa, medio ad 6 mm. lata, prope apicem ad 9 mm. diam., carinis novellissimis interdum obscure serrulatis; flores 1—2-nati, ad 6 cm. diam. (manu complanati); pedunculi in receptaculum gradatim transeuntes, 2—3 cm. longi, basi bracteati, bracteis lat. visis interdum superne dilatatis, 1·5—2 cm. longis, prope apicem ad 7 mm. diam.; sepala 5, obtusa, exteriora in flore maximo viso supra medium conspicue incrassata igiturque globosa,

ad 1·2 cm. longa, basi 5—6 mm. lata, interiora apice breviter obtuseque subulata, 8—9 mm. longa, basi 6 mm. lata, vel in floribus minoribus fere aequilonga, ad 8 mm. longa, ad 6 mm. lata; petala 4-seriata, intima pauca, e prope medium inferne angustata, prope apicem saepe leviter angustata, obtusa vel acuta, purpureo rosea angustissime saturatioreque vittata, 1·5—2·6 cm. longa, 0·75—2 mm. lata; filamenta saepe 3-seriata, alba, interiora breviter ciliate papillata, ad 5 mm. longa, antheris atrate purpureis vel saturate purpureo brunneis, polline pallidissime roseo vel griseo; ovarium e disco gradatim leviterque, vel in floribus ceteris ad 2 mm., elevatum, lobis obscuris, minute nitente tuberculatis; stigmata 8—10, in genere inter gracillima, superne attenuata, breviter caudata, ad 5 mm. longa.

Cape Prov.: in dit. Calvinia; "18 miles N.E. of Nieuwoudtville", Sept. 1960, *F. J. Stayner*. Karoo Garden 548/60. Fl. Jun. 1961.

Haec species etiam sunt collectiones sequentes.—Karoo Garden 553/60: in dit. Calvinia; "5 m. N.E. of Nieuwoudtville", Sept. 1960, *F. J. Stayner*. Idem 131/61: "Hantam River, near Loeriesfontein, Apr. 1961", *F. J. Stayner*.

In its floral characters this species resembles *C. serrulatum* L. Bol., which also has purple-rose petals, similar stamens, except that the shortly ciliate papillate filaments are not recorded, and also the same slender, but shorter, stigmas. The type-material of the older species consists of flowering branchlets only, and the branches are merely described as being "decumbent", without any mention of a creeping habit. But the type-plant had been in cultivation for about 9 years (unless some confusion of labels had occurred) before it was described and drawn, and considerable changes, vegetatively, may have taken place during that time; whereas that of the present species, flowering about 9 months after its collecting, retained much of its wild growth. In some of the very young leaves, however, the keel is obscurely serrulate, and the only other species in which this has been recorded is *C. serrulatum*.

Cephalophyllum littlewoodii L. Bol. sp. nov. (*Decumbentia*).—Plantae ferae 2 visae, in genere gracillimae notae; caulis ca. ad 7 mm. diam.; rami primarii decumbentes sed tamen non radicales, ad 18 cm. longi, internodiis 2—6 cm. longis, ad 1·5 mm. diam.; folia in "cephala" inferne supra complanata, superne teretia, e parum supra medium superne attenuata, molliter apiculata, subglauce viridia, ad 6 cm. longa, 1—2 mm. diam., cetera ad 2 cm. longa; flores solitarii; pedunculi conspicue intrusi, 2·5—3·5 cm. longi, bracteis prope basim positis, 1—2 cm. longis; receptaculum semiglobosum, cum aetate breviter crateriforme, tuberculatum, 3 mm. longum, 6 mm. diam.; sepala 5, tuberculata, basi 2—3 mm.

lata, exteriora e parum supra basim acute subulata, ad 7 mm. longa, interiora marginata, 3—5 mm. longa; petala ca. 5-seriata, inferne leviter angustata, saepius obtusa vel emarginata, infra laete rosea, supra rosea, vel utrimque purpureo rosea, ad 1·3 cm. longa, 0·5—1·25 mm. lata; filamenta ca. 4—5-seriata, pallide rosea, ad 5 mm. longa, antheris roseo purpureis, polline roseo; ovarium nitente tuberculatum, e disco ad 1 mm. elevatum, lobis leviter obtuseque compressis; stigmata 13, apice pallide roseo suffusa, gracillima, ad 2·5 mm. longa; capsula immatura 1 cm. diam.

Cape Prov.: in dit. Worcester; Bos Kloof, De Wet, Sept. 10, 1961, *R. C. Littlewood*. Karoo Garden 556/61.

(To be continued.)

Note.—The type specimens of all new species described in this paper are in the Bolus Herbarium, University of Cape Town, Rondebosch.